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09/989,249	11/20/2001	Roel Van Woudenberg	NL010003	9632

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS
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EXAMINER	
ORTIZ CRIADO, JORGE L	

ART UNIT	PAPER NUMBER
2655	6

DATE MAILED: 06/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/989,249	VAN WOUDENBERG, ROEL	
	Examiner	Art Unit	
	Jorge L Ortiz-Criado	2655	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 November 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-25* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-25* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *20 November 2001* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *4,5*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to because the unlabeled rectangular box(es) shown in the drawings should be provided with descriptive text labels. Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. The abstract of the disclosure is objected to because the text label "Fig. 1" on line 11 should be deleted. Correction is required. See MPEP § 608.01(b).

3. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77, portions (b) and (c), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

(a) TITLE OF THE INVENTION.
(b) CROSS-REFERENCE TO RELATED APPLICATIONS.
(c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
(d) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or
REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
(e) BACKGROUND OF THE INVENTION.
(1) Field of the Invention.
(2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
(f) BRIEF SUMMARY OF THE INVENTION.
(g) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
(h) DETAILED DESCRIPTION OF THE INVENTION.
(i) CLAIM OR CLAIMS (commencing on a separate sheet).
(j) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
(k) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

4. The disclosure is objected to because of the following informalities: the sections (a)-(k) if applicable, and as outlined above, should be preceded by a section heading in uppercase and without underlining or bold type, as provided in 37 CFR 1.77.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

6. Claims 1-6 and 11-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Sugiyama et al. U.S. Patent No. 5,614,938.

Regarding claim 1, Sugiyama et al. discloses a method of recording information on a multilayer record carrier by irradiating the record carrier by a radiation beam having a recording power (See col. 1 to col. 34; Figs. 1-26),

said multilayer record carrier comprising at least two substantially parallel information layers (See col. 1, line 63 to col. 2, line 41; col. 6, lines 17-37; Figs. 1-26) said method comprising the steps of:

a) a detecting a difference in a transmission property of at least one of said at least two information layers (See col. 6, lines 16-37; col. 24, col. 24 line 61 to col. 25, line3)

b) determining, on the basis of said detected difference in a transmission property, a corrected value for a recording power used for recording said information (See col. 6, lines 16-37; col. 24, col. 24 line 61 to col. 26 line 28), and

c) using said corrected value for recording said information on another one of said at least two information layers when said recording is effected through said at least one of said at least

two information layers at a position where said difference in a transmission property has been detected (See col. 6, lines 16-37; col. 24, line 61 to col. 26 line 28)

Regarding claim 2, Sugiyama et al. discloses wherein said record carrier is a writable optical disk and said at least one information layer is a semi-transparent layer (See col. 1, line 63 to col. 2, line 41; Figs. 1,5,10,11)

Regarding claim 3, Sugiyama et al. discloses wherein said difference in the transmission property is obtained by determining a portion of said at least one recording layer which contains recorded data (See col. 6, lines 16-37; col. 24, line 61 to col. 26 line 28)

Regarding claim 4, Sugiyama et al. discloses in which said corrected value is determined by measuring the reflection level difference in said other information layer when said recording is effected through a recorded area or through a non-recorded area of said at least one information layer (See col. 6, lines 16-37; col. 24, line 61 to col. 26 line 28)

Regarding claim 5, Sugiyama et al. discloses of using a power correction procedure provided in a recording apparatus for correcting said recording power according to said corrected value , (See col. 6, lines 16-37; col. 24, line 61 to col. 26 line 28; Figs. 1,13)

Regarding claim 6, Sugiyama et al. discloses said corrected value is used as a pre-set value for said power correction procedure at said position where said difference has been detected. (See col. 6, lines 16-37; col. 24, line 61 to col. 26 line 28)

Regarding claim 11, Sugiyama et al. discloses reading a corresponding specification provided on said record carrier from said record carrier, and in which said corrected value is determined from the corresponding specification read (See col. 6, lines 16-37; col. 24, line 61 to col. 26 line 28)

Regarding claim 12, Sugiyama et al. discloses in which said difference in said transmission property is obtained on the basis of a transmission map indicating recorded portions of said at least one information layer (See col. 5, line 5 to col. 6 line 37; col. 24, line 61 to col. 26 line 28)

Regarding claim 13, Sugiyama et al. discloses in which said difference in said transmission property is obtained on the basis of said transmission map combined with positions of header areas or gap portions (See col. 5, line 5 to col. 6 line 37; col. 24, line 61 to col. 26 line 28)

Regarding claim 14, Sugiyama et al. discloses wherein said transmission map is corrected on the basis of a determined displacement between said at least two information layers (See col. 5, line 5 to col. 6 line 37; col. 24, line 61 to col. 26 line 28; col. 12, line 36 to col. 14, line 19)

Regarding claim 15, Sugiyama et al. discloses wherein said transmission map is derived from a table of contents comprising information about the position of information recorded on said at least one information layer (See col. 5, line 5 to col. 6 line 37; col. 24, line 61 to col. 26 line 28)

Regarding claim 16, Sugiyama et al. discloses the step of pre-scanning the record carrier, said transmission map being derived from the pre-scanning operation (See col. 5, line 5 to col. 6 line 37; col. 24, line 61 to col. 26 line 28)

Regarding claim 17, Sugiyama et al. discloses wherein said pre-scanning operation is a quick scan operation in which only every N tracks of said at least one recording layer are scanned so as to determine the transmission states of the at least one information layer (See col. 5, line 5 to col. 6 line 37; col. 24, line 61 to col. 26 line 28)

Regarding claim 18, Sugiyama et al. discloses a recording apparatus for recording information on a multilayer record carrier provided with at least two substantially parallel information layers (See col. 1 to col. 34; Figs. 1-26), said apparatus comprising:

a recording unit (10) for recording said information with a predetermined recording power (See Figs. 1A,6,7A-7B; col. 5, line 5 to col. 6 line 37; col. 24, line 61 to col. 26 line 28), and

determining means for determining a difference in a transmission property of at least one of said at least two information layers (See Figs. 1A-ref# 10,6-ref#22,7A-7B; col. 5, line 5 to col. 6 line 37; col. 24, line 61 to col. 26 line 28),

wherein said recording unit is controlled to perform said recording with a corrected value of the recording power when said recording is effected on another one of said at least two information layers through said at least one information layer at a position where said difference has been detected (See col. 5, line 5 to col. 6 line 37; col. 24, line 61 to col. 26 line 28)

Regarding claim 19, Sugiyama et al. discloses wherein said determining means is an optical detection system for detecting light reflected at said at least one information layer (See Figs. 1A-ref# 10,6-ref#22,7A-7B; col. 5, line 5 to col. 6 line 37; col. 24, line 61 to col. 26 line 28)

Regarding claim 20, Sugiyama et al. discloses wherein said control of the recording unit to perform said recording with a corrected value of the recording power is carried out by a power calibration function of said recording apparatus. (See Figs. 1,6-ref#20,7A-7B; col. 5, line 5 to col. 6 line 37; col. 24, line 61 to col. 26 line 28)

Regarding claim 21, Sugiyama et al. discloses wherein said determining means is arranged to obtain a transmission map indicating recorded portions of said at least one information layer on the basis of a pre-scanning operation (See col. 5, line 5 to col. 6 line 37; col. 24, line 61 to col. 26 line 28)

Regarding claim 22, Sugiyama et al. discloses wherein said determining means is arranged to obtain a transmission map indicating recorded portions of said at least one information layer on the basis of a table of contents comprising information about the position of information recorded on said at least one information layer (See col. 5, line 5 to col. 6 line 37; col. 24, line 61 to col. 26 line 28)

Regarding claim 23, Sugiyama et al. discloses wherein said recording apparatus is an optical disk recording device (See Figs. 1A, 5, 6, 7A-7B; col. 5, line 5 to col. 6 line 37; col. 24, line 61 to col. 26 line 28)

Regarding claim 24, Sugiyama et al. discloses a multilayer record carrier provided with at least two substantially parallel information layers and suitable to be recorded by a single recording unit, wherein a specification is provided on said record carrier, said specification indicating a power correction factor to be used when recording is effected on one of said at least two information layers through another one of said at least two information layers (See col. 5, line 5 to col. 6 line 37; col. 24, line 61 to col. 26 line 28)

Regarding claim 25, Sugiyama et al. discloses said multilayer record carrier being a rewritable optical disk (See col. 5, line 5 to col. 6 line 37; col. 24, line 61 to col. 26 line 28)

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama et al. Patent No. 5,614,938 in view of Nishiuchi et al. International Publication Number WO0023990 / European Patent Application Publication Number EP 1124221.

Regarding claim 7, Sugiyama et al discloses all the limitations based on claim 1 as outlined above. Sugiyama et al discloses measuring differences in the reflection level of at least one of said at least two information layers at a predetermined first measuring point and using said corrected value at said predetermined first measuring point (See col. 2, lines 35-41; col. 4, lines 8-14; col. 5, line 5 to col. 6 line 37; col. 12, line 36 to col. 14, line 19; col. 24, line 61 to col. 26 line 28)

But Sugiyama et al fails to disclose comprising the step of:

i) determining a first angular offset between header areas on said at least one information layer and header areas on said other information layer by measuring differences in the reflection level in said other information layer caused by said header areas in said at least one information layer at a predetermined first measuring point;

j) deriving positions of header areas from said first angular offset determined; and

k) using said corrected value at said derived header positions.

However this feature is well known in the art as evidenced by Nishiuchi et al, which discloses a method of recording information on a multilayer record carrier by irradiating the record carrier by a radiation beam having a recording power determining a first angular offset between header areas on said at least one information layer and header areas on other information layer by measuring differences in the reflection level in said other information layer caused by said header areas in said at least one information layer at a predetermined first measuring point; and deriving positions of header areas from said first angular offset determined; and using said corrected value at said derived header positions (See paragraph [0081] to [0123]; Figs. 7,8,9)

It would have been obvious to one with ordinary skill in the art at the time of the invention to measure the angular offsets between header areas on said at least one information layer and header areas on said other information layer and deriving positions of header areas from said first angular offset determined and using said corrected value at said derived header positions by measuring differences in the reflection level in said other information layer caused by said header areas in said at least one information layer in order to obtain optimum recording

power and a stable data recording in result of the difference in reflection level measured, as suggested by Nishiuchi et al.

Regarding claim 8, the combination of Sugiyama et al. and Nishiuchi et al. would show also comprising the step of determining a second angular offset between header areas on said at least one information layer and header areas on said other information layer by measuring differences in the reflection level in said other information layer caused by said header areas in said at least one information layer at a second predetermined measuring point located at a radius of said record carrier different from that of the first predetermined measuring point, the header areas being derived from both the first angular offset and the second angular offset so as to account for a possible decentering of said at least two information layers (See Nishiuchi et al. paragraph [0081] to [0123]; Figs. 7,8,9)

Regarding claim 9, the combination of Sugiyama et al. and Nishiuchi et al. would show in which said corrected value is determined on the basis of said measured reflection level differences (See Sugiyama et al., col. 2, lines 35-41; col. 4, lines 8-14; col. 5, line 5 to col. 6 line 37; col. 12, line 36 to col. 14, line 19; col. 24, line 61 to col. 26 line 28)

9. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama et al. Patent No. 5,614,938 in view of Nishimura Japanese Patent Application Publication 2000-195054.

Sugiyama et al. discloses all the limitations based on claim 1, as outlined above.

Sugiyama et al. discloses recording(trial) and then executing an error check (See col. 6, lines 38-58; col. 26, lines 9-29)

But Sugiyama et al. fails to disclose in which said corrected value is determined by performing a trial recording during which test patterns are recorded on the record carrier which test patterns are recorded on the record carrier in a trial write area.

However this feature is well known in the art as evidenced by Nishimura, which discloses a method of obtain an optimums recording power by a trial recording during which test patterns are recorded on the record carrier in a trial write area. (See Abstract; Detailed description paragraph [006]-[008])

Therefore it would have been obvious to one with ordinary skill in the art at the time of the invention to perform a trial recording during which test patterns are recorded on the record carrier in a trial write area, in order to reducing degradation of the information recording area caused by the use of the information recording area for performing trial writing, and performing the information recording when the optimum recording power is obtained, as suggested by Nishimura.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jorge L Ortiz-Criado whose telephone number is (703) 305-8323. The examiner can normally be reached on Mon.-Thu.(8:30 am - 6:00 pm),Alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris H To can be reached on (703) 305-4827. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

joc

W. R. YOUNG
PRIMARY EXAMINER